U.S. Antarctic Marine Living Resources Program

2008-2009 Weekly Field Reports
Cape Shirreff, Livingston Island

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Seabirds:

1. Gentoo penguins in our reproduction study plots continue to brood chicks, 82% of the nests are brooding and 18% have failed. In the week since peak chinstrap penguin hatch 74% of the chinstrap penguin reproduction nests have hatched, 3% continue to incubate eggs, and 18% have failed.

2. We continue to monitor known age penguins that were banded here as chicks. Of the 37 known aged gentoo penguins that have nested 50% are brooding chicks and 50% have failed. All of the forty known aged chinstrap penguins have hatched or failed, 62% have hatched and 38% nests have failed.

3. The brown skuas continue to hatch this week. Of the 21 brown skua pairs that have initiated clutches 8 have hatched, 11 continue to incubate and 2 have failed without re-nesting. One of the pairs that had failed has since re-nested and is incubating an egg.

4. We have successfully recovered 10 Time Depth Recorders (TDRs) and 10 satellite tags (PTTs) that were deployed on nesting gentoo adults last week. This week we will deploy 10 TDRs and 10 PTTs on nesting chinstrap penguins.

5. We had a juvenile king penguin show up in the colony this past week. It was neat to see such a large penguin after being surrounded by gentoos and chinstraps for the last few months.

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Pinnipeds:

6. Our PTT (3) and GPS (2) instrumented females have all completed at least three trips to sea. Two are on their fourth trip to sea and another is on her sixth trip. All three PTT females are currently at sea. All are making two to three day trips.

7. All but two of our CCAMLR attendance females (n=29) have completed at least three trips to sea. Mean trip duration for the first trip to sea was 2.8 days (s.d.: 1.17; range: 1.1-5.3) and the mean trip duration for trip two was 2.6d (s.d.: 1.13). Two females have already completed six trips to sea.

8. On 3 January we collected our first sample of CCAMLR pup weights. Protocol requires collecting the first sample of pup weights 30 days after the median date of pupping. That date this year was 4 December, the earliest median date of pupping since 1997/98.

9. We recorded two new arrivals this week of adult tagged females this week. One was pregnant and gave birth on 1 January; the other was not pregnant. Tag re-sight surveys indicate 83.0% (176/212) of our tagged female population have returned to Cape Shirreff. The natality rate for returned females is now 83.0%.

10. We continue to see new arrivals of juvenile fur seals. To date we have seen 98 fur seals that were tagged as pups in previous years. Seven new known-aged seals have returned since last week. No yearlings have been seen yet.

11. Elephant seals are returning to molt in increasing numbers especially adult females. However, as of yesterday no females instrumented in 2007/08 have returned.

12. Leopard seals are increasing and we observe new animals tagged in previous years arriving almost daily. We have lost four of our CCAMLR attendance females' pups to leopard seals already. This reduces our sample size for the first six trips to sea to 25. We have had as many as six leopard seals at one time hauling out at one of the common haul out beaches within our fur seal study area.

13. We collected our third week of scats for studies of fur seal diet. All scats collected this week were composed primarily of krill.

Weather:

14. This was our second warmest week on record (the warmest was the first week we arrived in October). It was also the least windy with more fog and wet weather. Mean wind speed was 9.8 mph with maximum wind gust of 37mph. The mean temperature for the week was 2.0C. The high temperature for the week was 8.7C and the low was -0.4C. Total precipitation this week was 0.16 inches bringing the total precipitation since arriving to 1.8 inches.

Camp:

15. The *R/V Yuzhmorgeologiya* is scheduled to arrive at the Cape on 12 January and we are now counting the days to the arrival of our re-supply and our many friends on board.

Submitted by AMLR staff currently residing at the Cape Shirreff field station, Livingston Island.